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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,377	10/27/2003	Dipak K. Chowdhury	BX75/33207	5451

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EXAMINER	
FAY, ZOHREH A	

ART UNIT	PAPER NUMBER
1618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/694,377	CHOWDHURY ET AL.	
	Examiner	Art Unit	
	Zohreh A. Fay	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-4 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claims 1-6 are pending in the instant application.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The following precedent is believed relevant to the instant case. Regents of the University of California v. Eli Lilly & Co., 119 F.3d 1559, 1568 (Fed. Cir. 1997), cert. Denied, 523 U.S. 1089 S.Ct. 1548 (1998), hold that an adequate written description requires a precise definition, such as by structure, formula, chemical name, or physical properties, "not a mere wish or plan for obtaining the claimed chemical invention." Eli Lilly, 119, F.3d at 1566. The Federal Circuit Court has adopted the standard set forth in the Patent and Trademark Office guidelines for examination of Patent applications under 35 U.S.C. 112 first "written Description" requirement ("Guidelines"), 66 Fed.Reg 1099 (Jan. 5, 2001), which state that a written description can be met by "showing that an invention is complete by disclosure of sufficient detailed, relevant identifying characteristics, "including, inter alia, functional characteristics when coupled with a known or disclosed correlation between function and structure...."Enzo Biochem, inc. v. Gen-Probe inc., 296 F.3d, 316 1324-25 (Fed. Cir. 20020) (quoting guideline, 66 Fed Reg. At 1106 (emphasis added). Moreover,

although Eli Lilly and Enzo were decided within the factual content of DNA sequences, this does not preclude extending those reasoning of those cases to chemical structures in general. Univ. of Rochester v.G.D. Searle 7 Co., 249 F. supp. 2d 216, 225 (W.D.N.Y.2003).

Applying the reasoning of the above-cited case law to the facts at hand, the instant specification fails to provide an adequate written description of "therapeutic agent". The specification describes a number of therapeutic agents. The instant claim generally recite "therapeutic agent". When functional claims are drawn this broadly, they are inclusive of any therapeutic agents, which can be small molecules, peptides, peptide mimetics or RNA-DNA-based structures. The instant specification quite simply, does not disclose any therapeutic agent other than certain small molecules. As such it cannot possibly provide any direction for using any peptides, peptide mimetics or RNA-DNA based structures; no identifying characteristics of any kind, e.g. sequences are provided. Accordingly, the instant specification fails to provide an adequate written description of "therapeutic agent" generally.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (U.S. Patent 5,849,240) in view of Brodin et al. (U.S. Patent 6,031,007), Stiefel (U.S. Patent 5,466,446) and Marty (U.S. Patent 5,336,508).

Miller et al. teach the use of an antibiotic such as clindamycin in combination with poloxamer and hydroxypropylmethylcellulose. See column 2, lines 53-55 and column 5, lines 30-35. The above reference differs from the claimed invention in the concentrations of clindamycin, poloxamer and hydroxypropylmethylcellulose. Brodin et al. teach that poloxamer has been previously used at the claimed concentrations in pharmaceutical field. See example 8. Stiefel et al. teach that clindamycin at the claimed concentration has been previously used in combination with poloxamer. See claim 1. Marty teaches that hydroxypropylmethylcellulose has been previously used in

a pharmaceutical formulation at the claimed concentration. See example 9. It would have been obvious to a person skilled in the art to use clindamycin, poloxamer and hydroxypropylmethylcellulose at the claimed concentrations, motivated by the teachings of Brodin et al., Stiefel et al., and Marty, who indicate such concentrations have been previously used in the pharmaceutical art. Applicant has presented no evidence to establish the unexpected or unobvious nature of the claimed invention and as such claims 2 and 3 are properly rejected under 35 U.S.C. 103.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farng et al. (U.S. Patent 5,643,584) in view of Brodin et al. (U.S. Patent 6,031,007), Stiefel (U.S. Patent 5,466,446) and Dawson U.S Patent 6,541,447).

Farng et al. teach a pharmaceutical composition, which contains carbopol, poloxamer, clindamycin and trolamine. See column 5, lines 5-14 and lines 37-40 and column 6, lines 6-10. The above reference differs from the claimed invention in the concentrations used. Brodin et al. teach that poloxamer has been previously used at the claimed concentrations in pharmaceutical field. See example 8. Stiefel et al. teach that clindamycin at the claimed concentration has been previously used in combination with poloxamer. See claim 1. Dawson teaches that triethanolamine has been previously used at the claimed concentration in pharmaceutical formulation. See the abstract. Dawson also teaches carbopol at a concentration about the claimed concentration. See the abstract. It would have been obvious to a person skilled in the art to use clindamycin, poloxamer, carbopol and trolamine at the claimed concentrations, motivated by the teachings of Brodin et al., Stiefel et al., and Dawson, who indicate such concentrations have been previously used in the pharmaceutical art. Applicant has presented no evidence to establish the unexpected or unobvious nature of the claimed invention and as such claims 4 is properly rejected under 35 U.S.C. 103.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zohreh A. Fay whose telephone number is (571) 272-0573. The examiner can normally be reached on Monday to Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Z.F